CURRICULUM VITAE

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PERSONNAL

Marital Status : Married, two children
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EDUCATION

1980	Baccalaureat D *(Mathematics, Physics, Biology)*	High School of Saint-Louis, France
1982	DEUG B *(Degree in General Biological University Studies)*	University of Strasbourg, France
1983	License of Biochemistry	University of Strasbourg, France
1984	Maîtrise in Biochemistry *(Master's Degree)*	University of Strasbourg, France
1985	Diplôme d'Etudes Approfondies	University of Strasbourg, France
1985	Engineer in Biotechnology	European School of Biotechnology of the Upper Rhine Region, Strasbourg, France
1988	PhD in Molecular Biology at the Laboratory of Molecular Genetics of Eukaryotes *(LGME; supervisor: Pr. Pierre Chambon)*	University of Strasbourg, France

CARRER OVERVIEW

1988-1990	TRANSGENE S.A., France *(NASDAQ: TRGNY; NM: Transgene)*	Staff Scientist
1991-1992	TRANSGENE S.A., France *(NASDAQ: TRGNY; NM: Transgene)*	Head, Virology-Immunology Department
1993-1999	TRANSGENE S.A., France *(NASDAQ: TRGNY; NM: Transgene)*	Head,Gene Therapy Research
1999-2001	CRUCELL BV, The Netherlands *(NASDAQ: CRXL; EAX: CRXL)*	Vice-President, Research
2001-2003	DELTAGEN Inc., USA *(NASDAQ: DGEN)*	Chief Scientific Officer of Deltagen Europe, France
2003-Present	VIVALIS S.A., France *(NYSE-EURONEXT: VLS)*	Chief Scientif Officer, Vice-President Research & Development, Member of the Board
2001-Present	LCF Rothschild Venture Partners	Member of the Scientific Advisory Committee

PROFESSIONAL EXPERIENCE

1984: **ROCHE** (Basel, Switzerland): Three months training period in the laboratory of Dr. R. Then (Pharmaceutical Research Dpt); *Topic*: biochemical analysis of bacterial porins isolated from antibiotic-resistant strains.

1985: **RHÔNE-MERIEUX** (currently Merial, Lyon, France): Nine months training period in the laboratory of Dr. G. Chappuis; *Topic*: identification and biochemical characterization of the pathogenic agents (later shown to belong to the Pestivirus family) responsible for bovine and porcine diseases.

1988-1990: **TRANSGENE S.A.** (Strasbourg, France): **Project leader.**
TRANSGENE was founded in 1979 and is one of the oldest biotech company. TRANSGENE established its reputation by developing the world first recombinant vaccine, a rabies vaccines, used in several European and American countries to eradicate the diseases in the wild. The company went public in 1998 (Nasdaq and Euronext Paris) and is today a leader in gene therapy with several products in phase II clinical trials, mostly for cancer treatment.
Supervision of 3 technicians.
Research projects:

(i) Development of novel transgenic animal models (mice and rabbits) for the evaluation of potential anti-HIV1 treatments
(ii) Investigation in transgenic mice of the role of the HIV1 regulatory NEF, VIF, REV and TAT proteins in AIDS pathogenesis.
(iii) Evaluation in rhesus and cynomolgus macaques of various recombinant AIDS vaccine candidates (live attenuated viruses, recombinant purified viral proteins, poxvirus-derived vaccines, pseudovirions,...).
(iv) Project leader for a French national AIDS vaccine initiative aiming at testing various SIV vaccine candidates in rhesus monkeys.
(v) Project leader for a collaborative research program with Rhône-Poulenc (Aventis) aiming at developing novel cell-screening systems for the identification of anti-TAT and anti-Rev drugs.

1991-1992: **TRANSGENE S.A.: Head of the Virology-Immunology department.**
Supervision of 15 scientists, PhD students and technicians.
Research projects and responsibilities:

(i) Development and evaluation of candidate AIDS vaccines.
(ii) Development and *in vitro* and *in vivo* evaluations of novel immunotherapeutic strategies for breast cancer using a tumor-specific antigen (Muc1 + cytokines) expressed in a recombinant viral Pox vector.
(iii) Contribution to the preclinical development of a recombinant Pox vaccine for the immunotherapy of cervical cancer.

1993-1999: **TRANSGENE S.A.: Head of Gene Therapy Research.**
Supervision of 40 scientists, PhD students and technicians.
The mission was initially to create and organize a novel research department dedicated to gene therapy. This meant hiring scientists and technicians, setting-up appropriate level 2 and 3 laboratories, developing novel projects on adenoviral and retroviral vectors and establishing research programs on gene therapy for AIDS, cancer and cardiovascular diseases.
Research projects and responsibilities:

(i) Development of novel generations of safer and more efficient viral (human and animal adenovirus, murine retrovirus, simian lentivirus) and cellular vectors for human gene therapy applications.
(ii) Development and preclinical evaluations of gene therapy strategies for cancer, AIDS, Haemophilia, and cardiovascular diseases.
(iii) Key contributions to the preparation of the IND packages and to the clinical development of the cancer and AIDS gene therapy strategies (adenoviral vector expressing IL2, Vero cell line expressing IL2, inducible retroviral vector expressing IFNγ, adenoviral vector expressing CFTR). Interaction with the French and Swiss regulatory authorities.
(iv) Management of national and international research collaborations with various academic collaborators.
(v) Management of research collaborations with US corporate partners (Schering-Plough, Human Genome Science Inc.).
(vi) Very regular interactions with European and American biotech and pharmaceutical companies to present the scientific gene therapy strategies of the company.
(vii) Meetings with investors and biotech financial analysts. Contribution to the company's IPO (Nasdaq: TRGNY) in 1998.
(viii) Contribution to the consolidation of the company's IP position.
(ix) Regular teaching in various European universities
(x) Member of the editorial board of the Journal of Human virology and member of the board of the European Cytokine Society.
(xi) Invited speaker and/or chairman at numerous international meetings in Europe and the USA; regular speaker at various European and American universities and companies.
(xii) Regular reviewer of scientific publications for Gene Therapy, Human Gene therapy and the Journal of Virology.
(xiii) Scientific consultant for the Center for Transgene Technology and Gene Therapy of Pr; D. Collen (Leuven).
(xiv) Regular reviewer for international grant applications.

2000-2001: **CRUCELL NV** (Leiden, The Netherlands): **Vice-President, Research.**
(Nasdaq : CRXL ; www.crucell.com)
Crucell NV is the result of the merger in June 2000 between the Dutch companies Introgene BV and UbiSys BV. Crucell is now a leading European biotechnology company focussed on the development of vaccines and fully human antibodies. Crucell developed two technology platforms: a human cell line expression platform, PER.C6 and phage antibody-display selection technologies, including a subtractive selection technology, called Mabstract. These two technology platforms provide a powerful and effective means to discover, develop and produce a variety of biopharmaceuticals, especially human monoclonal antibodies and vaccines, for the treatment of human diseases. Such technologies are fully human and, as such, enable biopharmaceuticals to be developed and produced that do not have the limitations inherent in many biopharmaceuticals currently available.

Research projects and responsibilities:
(i) Integration of the research activities of IntroGene and UbiSys to set-up Crucell's new research organization.
(ii) Redefinition of the research priorities consecutive to the merger (focus on oncology and immunological diseases); recruitment of additional technical and scientific staff members.
(iii) Supervision of Crucell's research staff which included over 90 scientists and

technicians.

(iv) Consolidation of the company's IP position.

(v) Management of research collaborations with various academic collaborators (The vaccine Institute, NIH; Leiden University; Nijmegen University, Rotterdam University, Lille University...).

(vi) Management of research collaborations with European and US corporate partners (Merck, Isotis BV, Aventis, Schering AG, Berlex).

(vii) Preparation of IND packages for anti-cancer human monoclonal antibody candidates licensed to pharmaceutical partners.

(viii) Interaction with international investors and corporate partners to present the scientific strategy of the company. Participation at Crucell's IPO.

(ix) Invited speaker and/or chairman at numerous international meetings in Europe and the USA; regular speaker at various European and American universities and companies.

(x) Regular reviewer of scientific publications for Gene Therapy, Human Gene therapy and the Journal of Virology.

(xi) Introduction of a laboratory data management system.

2001-2003: **DELTAGEN Inc.** (Redwood City, USA): **Scientific director of Deltagen Europe, Illkirch, France.**

(Nasdaq : DGEN ; www.deltagen.com)

Deltagen is a genomic-based biotechnology company that provides data to pharmaceutical and biotechnology companies on the function, role and disease relevance of mammalian genes. In addition, Deltagen undertakes the discovery and development of secreted protein biotechnology drug candidates internally or in collaboration with other parties. Deltagen Europe S.A. played a significant role in Deltagen's genomic drug discovery program, with a particular focus on human nuclear receptors. Nuclear receptors control nearly every aspect of vertebrate development and adult physiology. Dysfunctions in nuclear receptors signaling have been implicated in numerous human disorders including diabetes, cancer, inflammation, cardiovascular diseases and obesity. Nuclear receptors constitute already validated drug targets for many clinical indications. Deltagen Europe S.A. uses a mouse conditional knock-out technology platform for the large-scale generation of *in vivo* functional information on nuclear receptors and for the identification of the most promising druggable targets. Furthermore, Deltagen Europe established novel technologies for the high-throughput screening and identification of novel small molecules targeting specific human nuclear receptors. These proprietary drug discovery platforms were applied to the human estrogen receptor and the androgen receptor, two well-validated targets involved in breast cancer and osteoporosis, and in prostate cancer, respectively. Such technologies allowed Deltagen Europe to identify highly original small molecules controlling the genetic and non-genetic pathways modulated by the selected targets, opening new potential therapeutic avenues for huge markets.

Research projects and responsibilities:

(i) Definition and implementation of Deltagen Europe's R&D strategy and activities in the field of nuclear receptor drug discovery and functional genomics.

(ii) Recruitment and supervision of all the technical, scientific, IT and support staff members.

(iii) Setting-up of appropriate drug screening, cell culture and molecular biology laboratories. Acquisition of small molecule libraries.

(iv) Development of a large platform of innovative drug screening technologies in yeast and mammalian cells, with the setting-up of a small molecule screening

team and laboratory.

(v) Development of engineered animal models for target validation and preclinical testing of small molecule leads.

(vi) Establishment of research collaborations with academic collaborators.

(vii) Generation of a strong IP position in the field of Nuclear Receptor drug discovery.

(viii) Grant applications for the support of some of Deltagen's highly innovative research programs.

(ix) Coordination of the construction of Deltagen Europe new research and development center of 6,000 square meters (to be completed by 2004).

(x) Coordination of Deltagen Europe's R&D activities with the R&D activities held at Deltagen Proteomics (Salt-Lake-City), Deltagen Research Labs (formely Combichem, San Diego) and Deltagen Inc. (Redwood City).

2001-present: **LCF Rothschild Venture Partners.** (Paris, France): **Member of the Advisory committee.**

As of the end of 2002, LCF Rothschild Venture Partners had over € 200 millions under management. The Advisory Committee combines the expertise of several professionals from the life science sector, all with significant industry experience. LCF VP consults the Advisory Committee on all investment or divestment opportunities for advice and validation.

2003-present: **VIVALIS SA** (Nantes, France). **Chief Scientific Officer, Vice-President, Research & Development, member of the board.**

(NYSE-Euronext: VLS; www.vivalis.com)

Vivalis SA is a public French Biotech company of 60 FTEs that manufactures vaccines and discovers drug to prevent and treat viral diseases. The company was successfully listed on Euronext-Paris on July 2007.

PUBLICATIONS

1) **Gautier, C., Mehtali, M. & Lathe, R.**
An ubiquitous expression vector, pHMG, based on a housekeeping gene promoter.
Nucl. Acids Res. 17 (1989), 8389.

2) **Tomasetto, C. Wolf, C., Rio, M.C., Mehtali, M., LeMeur, M., Gerlinger, P., Chambon, P. & Lathe, R.**
Breast cancer protein PS2 synthesis in mammary gland of transgenic mice and secretion into milk.
Molecular Endocrinology 3 (1989), 1579-1584.

3) **Mehtali, M. LeMeur, M. & Lathe, R.**
The methylation-free status of a housekeeping transgene is lost at high copy number. Gene 91 (1990), 179-184.

4) **Pons, M., Gagne, D., Nicolas, J.C. & Mehtali, M.**
A new cellular model of response to estrogens: a bioluminescent test to characterize (anti)estrogen molecules.
BioTechniques 9 (1990), 450-459.

5) **Kieny, M.P., Aubertin, A.M. & Mehtali, M.**
Approaches to vaccination against primate immunodeficiency viruses infection. In "Retroviruses of Human AIDS and Related Animal Diseases", Ed. Girard, M. & Valette, L., Fondation Marcel Merieux: Lyon, France (1990). 171-175.

6) **Bchini, O., Andres, A.C., Schubaur, B., Mehtali, M. LeMeur, M., Lathe, R. & Gerlinger, P.**
Precocious mammary gland synthesis in transgenic mice ubiquitously expressing human growth hormone.
Endocrinology 128 (1991), 539-546.

7) **Bchini, O., Mehtali, M. & Lathe, R.**
Abrogation of dominant glucose intolerance in SJL mice by a growth hormone transgene. J.Molecular Endocrinology 6 (1991), 129-135.

8) **Pancré, V., Pierce, R.J., Fournier, F., Mehtali, M., Delanoye, A., Capron, A. & Auriault, C.**
Effect of ubiquitin on platelet functions: possible identity with platelet activity suppressive lymphokine (PASL).
Eur. J. Immunol. 21 (1991), 2735-2741.

9) **Mehtali, M., M. Munschy, Caillaud, J.M., & Kieny, M.P.**
HIV1 regulatory genes induce AIDS-like pathologies in transgenic mice.
In "Retroviruses of Human AIDS and Related Animal Diseases", Ed. Girard, M. & Valette, L., Fondation Marcel Merieux: Lyon, France (1991). 25-30.

10) **Mehtali, M., Acres, B., & Kieny, M.P.**
Transgenic mice expressing HIV genes for *in vivo* evaluation of anti-HIV drugs. In "Viral quantitation in HIV infection", Ed. Andrieu, J.M., John Libbey Eurotext: Paris, France (1991). 97-111.

11) **Pons, M., Gagne, D., Nicolas, J.C. & Mehtali, M.**
Characterization of a new bioluminescent cellular model of response to estrogens.
In "Bioluminescence and Chemoluminescence: current Status", Eds Stanley, P.E. and Kriska, L.J., John Wiley & Sons, Chichester, New-York, Brisban, Toronto, Singapore (1991). 51-54.

12) **Mehtali, M. Munschy, Ali-Hadji, D., & Kieny, M.P.**
A novel transgenic mouse model for the *in vivo* evaluation of anti-HIV1 drugs.
AIDS Res. & Hum. Retroviruses 8 (1992), 1959-1965.

13) **Mehtali, M., Benavente, A., Beyer, C., Gloeckler, L., Schmitt, D., Fischer, F., Dott, K., Sene, C., kolbe, H., Hurtrel, B., Girard, M., Venet, A., Rivière, Y., Aubertin, A.M. & Kieny, M.P.**
Different approaches towards an HIV vaccine using SIV as a model.

In "Retroviruses of Human AIDS and Related Animal Diseases", Ed. Girard, M. & Valette, L., Fondation Marcel Merieux: Lyon, France (1992). 247-250.

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Protection of monkeys against SIV infection with live attenuated viruses.
In "Retroviruses of Human AIDS and Related Animal Diseases", Ed. Girard, M. & Valette, L., Fondation Marcel Merieux: Lyon, France (1993). 211-218.

15) **Liska, V., Spehner, D., Mehtali, M., Schmitt, D., Kirn, A. & Aubertin, A.M.**
Localization of viral protein X in simian immunodeficiency virus macaque strain and analysis of its packaging requirements.
J. Gen. Virology 75 (1994), 2955-2962.

16) **M. Mehtali.**
Des virus pour greffer des gènes.
La Recherche (1994), 1116-1118.

17) **Duhamel-Clerin, E., Villarroya, H., Mehtali, M., Lapie, P., Besnard, F., Gumpel, M. & Lachapelle, F.**
Cellular expression of an HMGCR promoter-CAT fusion gene in transgenic mouse brain: evidence for a developmental regulation in oligodendrocytes.
Glia 11 (1994), 35-46.

18) **Estaquier, J., Idziorek, T., De Bels, F., Barré-Sinoussi, F., Hurtrel, B., Aubertin, A.M., Venet, A., Mehtali, M., Muchmore, E., Michel, P., Mouton, Y., Girard, M. & Ameisen, J.C.**
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Proc. Natl. Acad. Sci. USA (1994), 91, 9431-9435.

19) **Imler, J.L., Dieterle, A., Dreyer, D., Mehtali, M. & Pavirani, A.**
An efficient procedure to select and recover recombinant adenovirus vectors.
Gene therapy (1995), 2, 263-268..

20) **Imler, J.L., Bout, A., Dreyer, D., Dieterle, A., Schultz, H., Valerio, D., Mehtali, M. & Pavirani, A.**
Trans-complementation of E1-deleted adenovirus: a new vector to reduce the possibility of co-dissemination of wild-type and recombinant adenoviruses.
Human Gene Therapy (1995), 6, 611-721.

21) **Dunn, C.S., Mehtali, M., Houdebine, L.M., Gut, J.P., Aubertin, A.M. & Kirn, A.**
Human immunodeficiency virus type 1 infection of hu-CD4 transgenic rabbits.
J. Gen. Virology (1995), 76, 1327-1336.

22) **Rasmussen U.B., Schlesinger Y., Pavirani, A. & Mehtali, M.**
Sequence analysis of the canine adenovirus 2 fiber-encoding gene.
Gene (1995), 159, 279-280.

23) **Leroy, P. and Mehtali, M.**
La thérapie génique : une alternative pour le traitement du cancer ?
Cancérologie aujourd'hui (1995) 4, 242-252.

24). **Mehtali, M., Imler, J.L., Sorg, T. and Pavirani, A.**
Thérapie génique de maladies humaines héréditaires et acquises.
Annales d'Endocrinologie (1995) 56, 571-574.

25) **Pavirani, A., Schatz, C. and Mehtali, M.**
Thérapie génique de la mucoviscidose par transfert adénoviral du gène CFTR.
Médecine/Sciences (1996) 12, 25-33.

26) **Sorg, T., Leissner, P., Calenda, V., LEROY, P., Sanhadji, K., TOURAINE, J.L., Pavirani, A. and**

Mehtali, M.
Thérapie génique de maladies infectieuses : le modèle du SIDA.
Médecine/Sciences (1996) 12, 13-24.

27) **Imler, J.L., Chartier, C., Dreyer, D., Dieterle, A., Sainte-Marie, M., Faure, T., Pavirani, A. and Mehtali, M.**
Novel complementation cell lines derived from human lung carcinoma A549 cells support the growth of E1-deleted adenovirus vectors.
Gene Therapy (1996) 3, 75-84.

28) **Calenda, V., Leissner, P., Marigliano, M and Mehtali, M.**
Gene therapy for HIV infection.
Hematol. Cell Ther. (1996) 38, 211-213.

29) **Chartier, C., Degryse, E., Gantzer, M., Dieterle, A., Pavirani, A. and Mehtali, M.**
Efficient generation of recombinant adenovirus vectors by homologous recombination in *Escherichia coli*.
J. Virol. (1996) 70, 4805-4810.

30) **Lusky, M., Michou, A.I., Santoro, L., Dreyer, D., Mourot, B, Dieterle, A., Pavirani, A. and Mehtali, M.**
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31) **Calenda, V., Leissner, P., Sorg, T., Leroy, P., Marigliano, M., Pavirani, A. and Mehtali, M.**
Gene therapy for infectious disease : the AIDS model.
OECD Publication on 'Gene Delivery Systems' (1996), 309-322.

32) **Calenda, V., Leissner, P., Sorg, T., Leroy, P., Marigliano, M., Touraine, J.L., Sanhadji, K., Pavirani, A. and Mehtali, M.**
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33) **Mehtali, M.**
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34) **Quintin-Colonna, F., Devauchelle, P., Fradelizi, D., Mourot, B., Faure, T., Kourilsky, P., Roth, C. and Mehtali, M.**
Gene therapy of spontaneous canine melanoma and feline fibrosarcoma by intratumoral administration of histoincompatible cells expressing human interleukin-2.
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35) **Rittner, K., Schultz, H., Pavirani, A. and Mehtali, M.**
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37) **Mehtali, M. and Sorg, T.**
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38) **Dobie, K., Mehtali, M., McClenaghan, M. and Lathe, R.**
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39) **Michou, A.I., Santoro, L., Christ, M., Julliard, V., Pavirani, A. and Mehtali, M.**
Adenovirus-mediated gene transfer : influence of transgene, mouse strain and type of immune response on persistence of transgene expression.
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40) **Roth, C. and Mehtali, M.**
Gene therapy with histoincompatible cells secreting human cytokines.
In : The Biotherapy of Cancer: from immunotherapy to gene therapy - (eds S. Chouaib). Editions INSERM, Paris (1997), In Press.

41) **Sanhadji, K., Leissner, P., Firouzi, R., Pelloquin, F., Kehrli, L., Marigliano, M., Calenda, V., Ottmann, M., Tardy, J.C., Mehtali, M. and Touraine, J.L.**
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42) **Christ, M., Lusky, M., Stoeckel, F., Dreyer, D., Dieterle, A., Michou, A.I., Pavirani, A. and Mehtali, M.**
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Protection of SIV mac-infected macaque monkeys against superinfection by a SHIV expressing envelope glycoproteins of HIV-1 type 1.
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48) **Hong S.S., Davison E., Legrand V., Mehtali M., Santis G, and Boulanger P.**
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51) **Zakhartchouk A.N., Reddy P.S., Baxit M., Baca-Estrada M.E., Mehtali M., Babiuk L. and Tikoo S.K.**
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PATENTS

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US6475480B1	5/11/2002	Use of adenoviral E4 reading frame to improve expression of a gene of interest
US6399587B1	4/6/2002	Reombinant adenoviral vectors comprising a splicing sequence
US6350575B1	26/2/2002	Helper viruses for the preparation of recombinant viral vectors
US6284252B1	4/9/2001	Transdominant TAT variants of the human Immunodeficiency Virus
US6228369B1	8/5/2001	Composition of trans-dominant variants of viral proteins for obtaining an anti-viral effect
US6204060B1	20/3/2001	Viral vectors and lines for gene therapy
US6133028	17/10/2000	Defective adenoviruses and corresponding complementation lines
US6066478	23/5/2000	Helper viruses for preparing recombinant viral vectors
US6040174	21/03/2000	Defective adenoviruses and corresponding complementation lines
US5981258	9/11/1999	Composition of trans-dominant variants of viral proteins for obtaing an antiviral effect
US5889175	30/3/1999	Nucleic acids encoding HIV1 transdominant mutants and their use to abrogate HIV1 viral replication

US PATENTS (Applications)

PATENT	ISSUED/PR	TITLE
US6492169BA	10/12/2002	Complementating Cell Lines
US0072120A1	13/06/2002	Helper viruses for the preparation of recombinant viral vectors
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EUROPEAN PATENTS (Granted)

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